

perhaps assist in any way in making the web? I have certainly never seen it employed in that operation.

EXPLANATION OF PLATE XII.

- Fig. 1.* Articulation of an auditory hair in *Pachygnathus Listeri*, Sund.
h, auditory hair (broken short); *b*, cup; *ch*, chitinous envelope;
m, matrix; *bl*, blood-sinus; *n*, main nervous cord of the leg;
m', a muscular fibre.
- Fig. 2.* An auditory hair with its cup, from the same animal, seen from above.
- Fig. 3a.* A rudimentary cup of the tarsus of the same.
- Fig. 3b.* The same seen from above.
- Fig. 4.* A longitudinal section through a maxilla of the same. *m*, muscle, cut through; *md*, maxillary gland, cut through; *t*, a tactile bristle; *go*, the olfactory organ.
- Fig. 5.* A part of the olfactory organ, more highly magnified. *ch*, perforated chitinous envelope; *z*, olfactory cones; *n*, nerve-fibres; *pl*, membranous plate passing under the olfactory cells.
- Fig. 6.* A part of the olfactory organ from above, more highly magnified. *a* shows the pores of the chitinous envelope, and at the same time the transverse section of the subjacent olfactory cells.
- Fig. 7.* Organ at the end of the metatarsus, seen from the surface.
- Fig. 8.* The same, in longitudinal section. *m*, matrix; *bl*, blood-vessel.

XLI.—Description of a new *Species of* *Microgale*.

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IN 1882* I had the pleasure of describing two small shrew-like Insectivores collected in Eastern Betsileo by the Rev. W. Deans Cowan, and founding for them the genus *Microgale* in the family Centetidae; and I now have to add to them a third species much larger than either, and differing in several more or less important details. I propose to associate with it the name of Dr. G. E. Dobson, the author of the 'Monograph of the Insectivora,' in which work an account of the anatomy of the two original species has already appeared†.

Microgale Dobsoni, sp. n.

Colour and general appearance very much that of a large shrew. Head long and narrow, the nose produced into a long slender snout. Ears large and thin—laid forward they just cover the eye; their structure as in *M. longicaudata*, but their outer edge less concave. Fore feet with five well-developed toes and small equal-sized claws; fifth toes reaching to the proximal end of the terminal phalanx of the fourth. Hind

* Journ. Linn. Soc., Zool. xvi. p. 319.

† Pt. 2, pp. 86 *a* to *e* (1883).

feet far larger and heavier than in the other species, their soles covered with fine bristles; proportions of toes and claws as in the fore feet. Foot-pads six in number both before and behind. Tail about as long as the head and body, uniform blackish, very thinly haired. Body-colour throughout a dull slaty grey, the tips of the hairs lighter; lips and chin yellowish, toes nearly white.

Teeth with the essential characters of those of the other species, but the incisors and canines both above and below are simpler in structure and differently proportioned. The upper incisors are unicuspid instead of bi- or tricuspid, and the first one is more than twice as long as either the second or third. Canine long, but still slightly shorter than the first incisor, and single-rooted. Both first and second premolars small and simple. Lower jaw with the first incisor small and bicuspid, second long and unicuspid, third small and simple. Canine with a well-marked posterior basal cusp.

A second upper milk-incisor, still remaining on one side in the type specimen, is tricuspid, and very similar in shape both to the milk and permanent second incisors of the other species, a fact which seems to show that the long unicuspid permanent second incisor of *M. Dobsoni* is a later development of the tricuspid tooth present in *M. longicaudata* and *Cowani*.

The skull is in its general shape quite similar to that of *M. longicaudata*, but the lower jaw is very much heavier and stouter in proportion; its height below the second premolar being no less than 2.8 mm., while in that species it is only about 1.5 mm.

Dimensions of the type (in alcohol) — Head 37 mm.; head and body 92; tail 102; hind foot (without claws) 22; fore arm and hand 29; ear, from base of outer edge 17, above skull 11; nose to eye 20; nose to ear 30.

Skull—length 30; breadth across maxillary zygomatic processes 10.6; interorbital breadth 6.8; upper dental series 15.4.

A single nearly adult male specimen of this species was obtained by the well-known Madagascar collector, Mr. W. Waters, in the Nandésen Forest, Central Betsileo, either in February or March of the present year.

In the strictly non-fossorial character of its claws, and the complete development of its pollex, *M. Dobsoni* is a true *Microgale*, and shows no tendency whatever towards the burrowing, four-toed *Oryzorictis*, a genus with which Dr. Dobson (*l. c.*) has suggested that future discoveries might tend to unite the present one, an opinion in which, however, I am quite unable to agree.